



PATENT COOPERATION TREATY

PCT

INTERNATIONAL PRELIMINARY EXAMINATION REPORT (PCT Article 36 and Rule 70)

4 FEB 2005

Applicant's or agent's file reference PCT 1890HHBRon		FOR FURTHER ACTION See Notification of Transmittal of International Preliminary Examination Report (Form PCT/PEA/416)	
International application No. PCT/EP 03/09699	International filing date (day/month/year) 01.09.2003	Priority date (day/month/year) 30.08.2002	
International Patent Classification (IPC) or both national classification and IPC E21B33/038			
Applicant COOPER CAMERON CORPORATION et al.			
<p>1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.</p> <p>2. This REPORT consists of a total of 5 sheets, including this cover sheet.</p> <p><input type="checkbox"/> This report is also accompanied by ANNEXES, i.e. sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).</p> <p>These annexes consist of a total of sheets.</p>			
<p>3. This report contains indications relating to the following items:</p> <p>I <input checked="" type="checkbox"/> Basis of the opinion</p> <p>II <input type="checkbox"/> Priority</p> <p>III <input checked="" type="checkbox"/> Non-establishment of opinion with regard to novelty, inventive step and industrial applicability</p> <p>IV <input type="checkbox"/> Lack of unity of invention</p> <p>V <input checked="" type="checkbox"/> Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement</p> <p>VI <input type="checkbox"/> Certain documents cited</p> <p>VII <input type="checkbox"/> Certain defects in the international application</p> <p>VIII <input type="checkbox"/> Certain observations on the international application</p>			
Date of submission of the demand 27.02.2004		Date of completion of this report 24.11.2004	
Name and mailing address of the international preliminary examining authority:  European Patent Office D-80298 Munich Tel. +49 89 2399 - 0 Tx: 523656 epmu d Fax: +49 89 2399 - 4465		Authorized Officer Bellingacci, F Telephone No. +49 89 2399-2784 	

**INTERNATIONAL PRELIMINARY
EXAMINATION REPORT**

International application No. PCT/EP 03/09699

I. Basis of the report

1. With regard to the **elements** of the international application (*Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17):*

Description, Pages

1-15 as originally filed

Claims, Numbers

1-31 as originally filed

Drawings, Sheets

1/2-2/2 as originally filed

2. With regard to the **language**, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language: , which is:

- ☐ the language of a translation furnished for the purposes of the international search (under Rule 23.1(b)).
☐ the language of publication of the international application (under Rule 48.3(b)).
☐ the language of a translation furnished for the purposes of international preliminary examination (under Rule 55.2 and/or 55.3).

3. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

- ☐ contained in the international application in written form.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority in written form.
☐ furnished subsequently to this Authority in computer readable form.
☐ The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.
☐ The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4. The amendments have resulted in the cancellation of:

- ☐ the description, pages:
☐ the claims, Nos.:
☐ the drawings, sheets:

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5. ☐ This report has been established as if (some of) the amendments had not been considered to go beyond the disclosure as filed (Rule 70.2(c)).

(Any replacement sheet containing such amendments must be referred to in this report.)

6. Additional observations, if necessary:

III. Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step, or to be industrially applicable have not been examined in respect of:

☐ the entire international application,

☒ claims Nos. 4-31

because:

☐ the said international application, or the said claims Nos. relate to the following which do not require an international preliminary examination (specify):

☐ the description, claims or drawings (*indicate particular elements below*) or such that no meaningful opinion could be formed (*specify*):

☐ the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.

☒ no international search report has been established for the said claims Nos. _____

2. A meaningful international preliminary examination cannot be carried out due to the following reasons:

☐ the written form has not been furnished or does not comply with the Standard

☐ the computer readable form has not been furnished or does not comply with the

V. Reasoned statement under Article 35(2) with regard to novelty, inventive step, industrial applicability and citations and explanations supporting such statement

1. Statement

Novelty (N)	Yes: Claims	1-3
	No: Claims	
Inventive step (IS)	Yes: Claims	
	No: Claims	1-3
Industrial applicability (IA)	Yes: Claims	1-3
	No: Claims	

2. Citations and explanations

see separate sheet

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Reference is made to the following documents:

D1 = US 2001/0011592 A1

D2 = US 4 280 719 A

III - Non-establishment of opinion

III-1 Claims 4 to 31 have not been examined as no search report is available for said claims.

V - Reasoned statement under Rule 66.2 (a)(ii)

V-0 - One of the features in the characterizing portion of claim 1 is that some contact elements are allocated in a specific way. The wording of the preamble of claim 1 is however such, that said contact elements are not part of the claimed mechanism (the claim positively states that the connecting mechanism comprises a cam operated component "for" shifting contact elements, but does not state that the mechanism comprises said elements). The claim is therefore unclear, as it relates to a mechanism characterized by features of a component which is not part of said mechanism.

- Furthermore, in the characterizing part of claim 1 is specified that contact elements are allocated in "levels essentially parallel to the insertion direction" of the parts which are to be connected. Said direction however is axial, while it results from fig. 1 that each level 14, 15 and 16 extends circumferentially and therefore perpendicularly to the insertion direction. The description therefore contradicts instead of supporting the claims.

Notwithstanding the above lack of clarity (Art. 6 PCT), it is attempted to examine the application, assuming that the mechanism according to claim 1 comprises parts (2, 3) and contact elements (7, 8, 9), and that the "levels" are as in fig. 1.

V-1 As far as claim 1 can be understood the closest prior art is D1, as it describes a connecting mechanism as in the preamble of claim 1. The features in the characterizing part are new and the claim meets therefore the corresponding requirement of Art. 33(2) PCT.

V-2 The problem objectively solved by the characterizing features of claim 1 is to provide for a secure holding of the two parts even when the contact surface between the two parts is limited (application, col. 3, lines 3,4).
D2 teaches that the reliability of a connection, in particularly for an offshore riser,

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can be increased by distributing the contact elements in two levels parallel to the insertion direction of the two parts (see col. 4, lines 3-11 and fig 3a, 3b).

The skilled man will consider therefore as an obvious alternative to modify accordingly the connecting mechanism according to D1, whereby claim 1 does not meet the inventive step requirement of Art. 33(3) PCT.

V-3 The subject-matter of claims 2 and 3 is also known from the combination of D1 and D2, and therefore also said claims do not meet the inventive step requirements of Art. 33(3) PCT.

V-4 For completeness the following is added:

The use of the expression "according to one of the previous claims" throughout claims 4 to 31 prevents from establishing the scope of the claims and therefore it is not clear.

If the expression "according to one" is read with the meaning of "according to any one" of the antecedent claims, it results that a large part of the resulting combinations is not fully defined, as the features additionally specified in the majority of the claims are not defined unless said claims are seen as dependant on specific one(s) of the antecedents. As an example, claim 8 refers to a "ring (24)", which ring is defined exclusively in claim 4, whereby claim 8 is fully defined if seen as dependant, directly or indirectly, on claim 4 but undefined if seen as part of any other dependency chain.

If the expression "according to one of" is read with a limiting effect, i.e. as meaning "according to a specific one" of the antecedent claims then the expression is unclear as it is not apparent which one(s) should be said specific claims.